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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,795	11/08/2001	Gene Edward Kouba	T-5992	5400

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EXAMINER
REIFSNYDER, DAVID A

ART UNIT	PAPER NUMBER
1723	7

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,795	KOUBA, GENE EDWARD	
	Examiner	Art Unit	
	David A Reifsnyder	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) *1-25 and 38-52* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2-4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the Invention of Group II in Paper No. 6 is acknowledged. The traversal is on the grounds that the apparatus of Invention I can not be used to practice a materially different process because "the apparatus is intended to keep droplets coalesced or at least minimize the dispersion of droplets prior to introduction into one or more separators Applicant does not understand why only portion of a fluid mixture would be passed to a cooperating liquid separation apparatus or how that would be a materially different process." This is not found persuasive because the reason one would use the flow conditioning apparatus to pass only a portion of the fluid mixture would be because one is using the flow conditioning apparatus as a **liquid separation apparatus.** Furthermore, the applicants argument included another use for the flow conditioning apparatus. The applicant argued that one use of the flow conditioning apparatus is to **minimize the dispersion of droplets** prior to introduction into one or more separators, while the process uses the flow conditioning apparatus to **coalesce the droplets.**

The applicant also argues that Groups II and III are highly related and implies that Groups II and III are related as process and apparatus. Groups II and III are not related as process and apparatus because Group III includes a separation system, and the applicant statement that Group III has a separation apparatus is incorrect.

Furthermore, if Groups II and III were related as process and apparatus then Group III would not exist as those claims would be part of Group I.

The rest of the applicant's arguments is that the Searches for all the Groups is so close as to not be a burden to do. This is not true as the Searches for all the Groups is different.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-24 and 38-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

In The Title

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested:---Method for separating liquids in a separation system having a flow conditioning apparatus and separation apparatus---

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inlet opening **containing a plurality of orifices** must be shown or that feature must be canceled

from **claim 35.** Furthermore the inlet **including a plurality of inlets** must be shown or that feature canceled from **claim 36.** No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 35 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the **outlet opening including a plurality or orifices**, does not reasonably provide enablement for the **inlet opening including a plurality of orifices**. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. See page 16 lines 23-24 which discloses an outlet opening 224 including a plurality of orifices 226 and page 20, lines 30-31 which discloses an outlet opening 324 including a plurality of orifices 326.

Claim 36 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to teach instantly claimed inlet **including a plurality of inlets.**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26-28 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Sams et al.

Regarding claims 26-28 and 33; Sams et al. discloses a method of separating an oil and water mixture received from a wellbore, the method comprising the steps of: passing the oil and water mixture through a flow conditioning apparatus (10), the flow conditioning apparatus (10) having an inlet (30) with an inlet opening, an outlet (32) with an outlet opening; and a swirl chamber disposed there between with the inlet (30) and outlet (32) being configured relative to the swirl chamber such that the flow of the oil and water fluid mixture through the inlet to the swirl chamber and out the outlet induces swirling of the oil and water mixture with droplets of at least one of the oil and water coalescing; and passing the oil and water mixture to a cooperating gravitational or centrifugal oil and water separator wherein the oil and water mixture is separated with the efficiency of the gravitational or centrifugal oil and water separator being enhance by

the existence of the coalesced drops of oil and/or water created by the flow conditioning apparatus (10). (See the Abstract and Figs. 1-5)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sams et al. in view of Hesse et al.

Regarding claim 29; Sams et al. discloses method of separating an oil and water mixture received from a wellbore as discussed above but fails to disclose that the outlet 32 of his flow conditioning apparatus 10 has a plurality of orifices. Hesse et al discloses an oil and water separator including two parallel hydrocyclones. It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have use Hesse et al's two hydrocyclones as Sam et al.'s centrifugal oil

and water separator since Hesse et al's two hydrocyclones separate the oil and water using centrifugal force. Furthermore, since Hess et al's two hydrocyclones are in parallel it would be required that Sams et al's outlet have a plurality of orifices.

Claims 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohaychuk et al. in view of Schmidt et al.

Bohaychuk et al. discloses a method of conditioning an oil and water mixture received from a wellbore, the method comprising the steps of: passing the oil and water mixture through a choke flow conditioning apparatus (1), the choke flow conditioning apparatus having an inlet (4) with an inlet opening, an outlet (5) with an outlet opening; and a swirl chamber (3) disposed there between, a plurality of ports (9, 10) lead into the swirl chamber (3) with the plurality of ports (9, 10) being configured relative to the swirl chamber (3) such that the flow of the oil and water mixture through the plurality of ports (9, 10) to the swirl chamber (3) and out the outlet (5) induces swirling of the oil and water mixture, the swirling of the oil and water mixture inherently causing droplets of at least one of the oil and water to coalesce; the rate of flow of the oil and water mixture being controlled by a throttling sleeve (8) positioned in the swirl chamber (3) for varying the size of the plurality of ports (9, 10). Bohaychuk fails to disclose that his choke flow conditioning apparatus (1) is used to pass the oil and water mixture to a cooperating gravitational or centrifugal oil and water separator wherein the oil and water mixture is separated with the efficiency of the gravitational or centrifugal oil and water separator being enhance by the existence of the coalesced drops of oil and/or water created by

the flow conditioning apparatus (1). Schmidt et al. discloses a method of separating an oil and water mixture received from a wellbore, the method comprising the steps of: conditioning an oil and water mixture received from a wellbore by passing the oil and water mixture through a choke flow conditioning apparatus (28) and then passing the oil and water mixture to a cooperating hydrocyclone (32) for centrifugal separation of the oil and water mixture; however, Schmidt et al. fails to disclose the particulars of his choke flow conditioning apparatus (28). It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention for Bohaychuk et al.'s flow conditioning apparatus (1) to pass the oil and water mixture to a cooperating hydrocyclone, because Schmidt et al. teaches that after conditioning an oil and water mixture received from a wellbore by passing the oil and water mixture through a choke flow conditioning apparatus (28) it is common to pass the oil and water mixture to a cooperating hydrocyclone (32) for centrifugal separation of the oil and water mixture.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohaychuk et al. in view of Schmidt et al. as applied to claims 26-36 above, and further in view of Bouldin et al.

Bohaychuk et al. in view of Schmidt et al. suggests a method of separating an oil and water mixture received from a wellbore as discussed above but fails to disclose that the choke flow conditioning apparatus is disposed down hole in the wellbore. Bouldin et al. discloses in his Abstract that it is common to place a choke flow conditioning apparatus down hole in a wellbore. It is considered that it would have been obvious to

one having ordinary skill in the art at the time of the invention to have placed Bohaychuk et al.'s in view of Schmidt et al.'s choke flow conditioning apparatus down hole as taught by Bouldin et al. since that is a common location to place a choke flow conditioning apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnyder whose telephone number is 1-703-308-0456. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on 1-703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 1-703-872-9310 for regular communications and 1-703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1-703-308-3601.

David a Reifsnyder

David A Reifsnyder
Primary Examiner
Art Unit 1723

DAR
May 5, 2003